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FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 12:15:23 ON 07 DEC 2004

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L1          2581 S (ENZYME CONJUGATE)
L2           472 S L1 AND DRUG?
L3           378 S L2 AND ANTIBOD?
L4             0 S L3 AND ARRAY?
L5            24 S L3 AND IMMOBILI?
L6            22 DUPLICATE REMOVE L5 (2 DUPLICATES REMOVED)
L7             6 S L1 AND COCAINE?
L8             4 DUPLICATE REMOVE L7 (2 DUPLICATES REMOVED)
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ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:190639 CAPLUS
DN 116:190639
ED Entered STN: 16 May 1992
TI An analyte-substitute reagent for use in specific binding assay methods, devices and kits
IN Baugher, Bennett W.; Devereaux, Sharon M.; Chamberlain, Aurora J.; Ungemach, Frank S.
PA Abbott Laboratories, USA
SO Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G01N033-53
ICS G01N033-543
CC 9-10 (Biochemical Methods)
Section cross-reference(s): 4, 23, 24, 25
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 467078	A2	19920122	EP 1991-109936	19910618
	EP 467078	A3	19920506		
	EP 467078	B1	19960508		
	R: DE, ES, FR, IT				
	ES 2089057	T3	19961001	ES 1991-109936	19910618
	CA 2047050	AA	19920119	CA 1991-2047050	19910715
	JP 04232860	A2	19920821	JP 1991-178035	19910718
	JP 2579392	B2	19970205		
	US 5340748	A	19940823	US 1993-67254	19930525
	US 5501985	A	19960326	US 1994-230995	19940421
PRAI	US 1990-554304	A	19900718		
	US 1993-67254	A1	19930525		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 467078	ICM	G01N033-53
	ICS	G01N033-543
EP 467078	ECLA	G01N033/543B; G01N033/94
US 5501985	ECLA	G01N033/543B; G01N033/94H

AB Reagents, devices, methods, and kits used in the anal. of low-mol.-weight compds. too small to bind 2 sp.-binding members at the same time are described. The method comprises (a) contacting the test sample sequentially or simultaneously with (i) an analyte-substitute reagent comprising an analyte component attached to a ligand component and (ii) a 1st sp. binding member capable of binding an epitope on both the test analyte and the analyte component; (b) contacting mixture from a sequentially or simultaneously with (i) a capture reagent comprising a 2nd binding member sp. for the analyte-substitute reagent and (ii) an indicator reagent comprising a label and a 3rd binding member for binding the reagent; and (c)detecting bound or free label. The analyte component has ≥1 epitope in common with the analyte, and the ligand component binds to a ligand-binding member but is not reactive with the analyte-sp. binding member. A competitive EIA for **cocaine** in urine is described using antibody to a **cocaine** analog (preparation described) (I), a I-fluorescein derivative complex as the analyte-substitute reagent, and antifluorescein antibody capture reagent conjugated to latex microparticles.
ST small analyte specific binding assay; immunoassay small analyte; competitive immunoassay small analyte; **cocaine** competitive EIA; enzyme immunoassay **cocaine**
IT Latex
(carboxy-derivatized, microparticles, conjugates with anti-fluorescein

antibody, for **cocaine** immunoassay)

IT Surfactants
(effect of, in morphine immunoassay)

IT Immunoassay
(of low-mol.weight analyte, analyte-substitute reagents for)

IT Antibodies
RL: ANST (Analytical study)
(to **cocaine** analog, **enzyme conjugates**, in **cocaine** immunoassay)

IT Immunoassay
(competitive, of low-mol.weight analyte, analyte-substitute reagents for)

IT Albumins, compounds
RL: ANST (Analytical study)
(conjugates, with **cocaine** analog, as immunogen for **cocaine**-reactive antibodies)

IT Thyroglobulins
RL: ANST (Analytical study)
(conjugates, with morphine analog, in morphine immunoassay)

IT 2321-07-5, Fluorescein
RL: ANST (Analytical study)
(antibodies to, in **cocaine** immunoassay)

IT 20290-09-9D, thyroglobulin conjugates
RL: ANST (Analytical study)
(as immunogen for antibodies to morphine)

IT 57-27-2, Morphine, analysis
RL: ANT (Analyte); ANST (Analytical study)
(determination of, by immunoassay)

IT 50-36-2, **Cocaine**
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in urine, by competitive EIA)

IT 140457-30-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and amination of, in **cocaine** analog preparation for immunoassay)

IT 119094-47-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and amination of, in preparation of reagent for morphine immunoassay)

IT 5796-31-6P, Ecgonine hydrochloride
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification of, in **cocaine** analog preparation for immunoassay)

IT 119094-63-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of, in preparation of reagent for morphine immunoassay)

IT 140457-34-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, as **cocaine** analog for immunoassay)

IT 7143-09-1P, Ecgonine methyl ester 140457-31-4P 140457-32-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in **cocaine** analog preparation for immunoassay)

IT 140457-34-7DP, albumin conjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as immunogen, for preparation of antibodies reactive with

cocaine)

IT 82169-58-2DP, reaction products with morphine derivative 140476-25-1DP, reaction products with fluorescein derivative
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as reagent in morphine immunoassay)

IT 140476-25-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, in preparation of reagent for morphine immunoassay)

IT 34619-03-9, Di-tert-butylcarbonate
RL: ANST (Analytical study)
(reaction of with **cocaine** analog, in **cocaine** analog preparation for immunoassay)

IT 9001-78-9D, conjugates with antibodies
RL: ANST (Analytical study)
(to **cocaine** analog, for **cocaine** immunoassay)

IT 9003-53-6D, Polystyrene, conjugates with antibodies
RL: ANST (Analytical study)
(to fluorescein, in morphine immunoassay)

IT 51306-35-5D, complexes
RL: ANST (Analytical study)
(with **cocaine** analog, as reagent for **cocaine** immunoassay)

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IT 51306-35-5D, complexes
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(with **cocaine** analog, as reagent for **cocaine** immunoassay)

ANSWER 1 OF 4 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
DUPLICATE 1
AN 1994:399497 BIOSIS
DN PREV199497412497
TI Improved sensitivity of enzyme immunoassay for **cocaine** and benzoylecgonine using heterologous hapten-**enzyme conjugates**.
AU Chen, Peilin; Watt, David S.; Tai, Hsin-Hsiung [Reprint author]
CS Div. Med. Chem., Coll. Pharm., Univ. Ky., Lexington, KY 40536, USA
SO Research Communications in Substances of Abuse, (1994) Vol. 15, No. 1-2, pp. 71-80.
CODEN: RCSADO. ISSN: 0193-0818.
DT Article
LA English
ED Entered STN: 14 Sep 1994
Last Updated on STN: 15 Sep 1994
AB Antibodies for **cocaine** and benzoylecgonine were prepared by established methods using diazotized 4-aminococaine or 4-aminobenzoylecgonine conjugated to bovine serum albumin as immunogens. Enzyme immunoassay was first developed using diazotized 4-aminococaine or 4-aminobenzoylecogonine conjugated to horseradish peroxidase as the enzyme labels. The IC-50!s of **cocaine** and benzoylecgonine were 4 ng/ml and 2 ng/ml for their respective antibodies. However, the IC-50!s of **cocaine** and benzoylecgonine decreased to 0.4 ng/ml and 0.1 ng/ml respectively when two heterologous haptens, 4-formylcocaine and 4-formyl benzoylecgonine, were synthesized and used for enzyme labeling. The sensitivity of the assays was considerably improved using the heterologous bridge strategy.
CC Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Enzymes - Methods 10804
Pharmacology - Neuropharmacology 22024
Toxicology - Pharmacology 22504
Immunology - General and methods 34502
IT Major Concepts
Enzymology (Biochemistry and Molecular Biophysics); Immune System (Chemical Coordination and Homeostasis); Pharmacology; Toxicology
IT Chemicals & Biochemicals
COCAINE; BENZOYLECGONINE
IT Miscellaneous Descriptors
ANALYTICAL METHOD; ANTIBODY CROSS-REACTIVITY; 4-AMINOBENZOYLECGONINE; 4-AMINOCOCAINE
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 50-36-2 (**COCAINE**)
519-09-5 (BENZOYLECGONINE)

ANSWER 1 OF 4 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
DUPLICATE 1
AN 1994:399497 BIOSIS
DN PREV199497412497
TI Improved sensitivity of enzyme immunoassay for **cocaine** and benzoylecgonine using heterologous hapten-**enzyme conjugates**.
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CC Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Enzymes - Methods 10804
Pharmacology - Neuropharmacology 22024
Toxicology - Pharmacology 22504
Immunology - General and methods 34502
IT Major Concepts
Enzymology (Biochemistry and Molecular Biophysics); Immune System (Chemical Coordination and Homeostasis); Pharmacology; Toxicology
IT Chemicals & Biochemicals
COCAINE; BENZOYLECGONINE
IT Miscellaneous Descriptors
ANALYTICAL METHOD; ANTIBODY CROSS-REACTIVITY; 4-AMINOBENZOYLECGONINE; 4-AMINOCOCAINE
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 50-36-2 (**COCAINE**)
519-09-5 (BENZOYLECGONINE)

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     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT
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L8             4 DUPLICATE REMOVE L7 (2 DUPLICATES REMOVED)

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ANSWER 15 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:189194 CAPLUS
DN 116:189194
ED Entered STN: 16 May 1992
TI Evaluation of rapid qualitative **drugs** of abuse kits
AU Anderson, G.; Colletti, A.; Foley, T.; Golkar, S.; Miao, R.; Patel, A.; Paez, S.; Scott, M.
CS Hycor Biomed. Inc., Garden Grove, CA, USA
SO American Clinical Laboratory (1992), 11(1), 26
CODEN: ACLAE7; ISSN: 1041-3235
DT Journal
LA English
CC 4-2 (Toxicology)
AB The accuPINCH qual. screening kits (Hycor Biomedical Inc., Garden Grove, California) are easy to use and require little training and need no instrumentation. The test is a competitive immunoassay that incorporates the use of an enzyme conjugated to the resp. **drug**, a disk with **antibody** against the **drug** (separation disk), and a second disk containing a chromogen (detection disk). The chromogen system **immobilized** on the detection disk is ABTS in combination with horseradish peroxidase (HRP) and glucose. In the presence of **enzyme conjugate**, glucose is oxidized forming hydrogen peroxide. The latter serves as a reactant in the HRP-mediated oxidation of ABTS. The resulting green color is visually interpreted on the detection disk.
ST abuse **drug** kit evaluation; forensic abuse **drug** screening kit
IT Pharmaceutical analysis
(**drug** screening in, forensic, screening kits in relation to)
IT Legal chemistry and medicine
(screening kits for abuse **drug** anal. in)

ANSWER 15 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
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LA English
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ST abuse **drug** kit evaluation; forensic abuse **drug** screening kit
IT Pharmaceutical analysis
(**drug** screening in, forensic, screening kits in relation to)
IT Legal chemistry and medicine
(screening kits for abuse **drug** anal. in)